CHARGE NUMBER:

1503

PROJECT TITLE:

Modified Smoking Materials

PROJECT LEADER: PERIOD COVERED: DATE OF REPORT:

J. G. Nepomuceno October, 1985 November 7, 1985

I. Tobacco Extrusion

Objective:

To develop a process for extrusion of foamed tobacco articles.

Status:

Modifications to the filter design resulted in further taste improvements for the extruded rod prototypes. These handmade models were made with a tobacco filler section incorporated within a dual filler plug configuration. Machine-made samples are being prepared for testing with a larger panel.

Plans:

Complete evaluation of machine-made prototypes using the modified filters with a larger in-house panel by December, 1985.

II. Foamed Filler Binder

Objective:

To develop a process for applying a subjectively acceptable foamed binder to the tobacco filler in order to improve coal strength, reduce loose ends and allow for weight reduction.

Status:

Results of an internal panel test of Marlboro cigarettes with and without binders (30% licorice/1% pectin) showed no significant differences between the two models.

Because bigger improvements in cigarette firmness were shown using a more recent binder formulation (12.5% licorice/12.5% degraded pectin), Marlboro-type models with 50 milligram reductions were made for further panel testing. These cigarettes are currently being analyzed for smoke deliveries prior to panel testing.

Plans:

Initiate panel testing of Marlboro-type models with 50 milligram weight reduction.

Produce prototypes using modified Players Lights blend for internal panel testing.

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III. Dry Formed Rods

Objective:

To develop a process for producing low density cigarette rods.

Status:

It was shown that tobacco coated with pectin binders and then dried could be reactivated with moisture to form a cohesively bound rod. Various methods for implementing this concept on a continuous process are being investigated.

Cigarettes with binders applied at the chimney were made on the Tandem maker using forced hot air to dry the tobacco/binder system prior to the bed entering the garniture. Cigarettes are currently being analyzed for firmness.

Plans:

Continue evaluation of using tobacco precoated with binders for low density rod formation.

JGN/lad